

## A NEW SPECIES OF TEMPLETONIA (PAPILIONACEAE) FROM WESTERN AUSTRALIA

by

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### INTRODUCTION

An account of the genus *Templetonia* is being prepared for the Flora of Central Australia and this opportunity is taken of describing a very distinctive new species which occurs in Western Australia.

### DESCRIPTION

**Templetonia incana** J.H. Ross, sp. nov., affinis incertae; ab omnibus speciebus dense incano-pubescentes, foliis magnis simplicibus, stipulis conspicuis differt.

Frutex usque ad 3 m altus, inermis; ramuli juveniles, folia, stipuli et calyces dense et persister incano-pubescentes. Folia simplicia; petiolus 0.6-1.6 cm longus; lamina 2.5-7.5 cm longa, 1.2-2.6 cm lata, elliptica, ovata vel elliptica-oblonga, apice rotundata vel obtusa, apiculata, costa et nerviis lateralibus subtus satis obviis. Stipulae conspicuae, 4-11 mm longae, 2.5-6 mm latae, dense et persister incano-pubescentes. Flore axillares, solitarii vel gemini; pedicelli usque ad 1.5 cm longi, persister incano-pubescentes; bracteae ad basim pedicellorum usque ad 6 x 1.2 mm; bracteolae usque ad 5 mm longae, caducae. Calyx 5-dentatus, usque ad 17 mm longus. Corolla ruber; vexillum suborbiculare, usque ad 24 mm longum; carina et alae usque ad 24 mm longae, unguiculatae. Stamina 10; filamenta in columnam antice fissam connata. Ovarium usque ad 9 mm longum, glabrum. Legumina haud matura, oblonga, 1.7-2.5 cm longa, 0.9-1.2 cm lata. Semina ignota.

*Shrub* to 3 m high with several slender sparingly branched stems or a solitary much branched stem; young branchlets, leaves, stipules and inflorescences clothed with a dense greyish velvety indumentum; *stems* terete, unarmed, the epidermis on the older stems sometimes splitting to reveal a greenish-yellow or yellowish-brown inner layer. *Leaves* simple, petiolate; petiole 0.6-1.6 cm long; lamina (2.5) 3-7.5 cm long; (1.2) 1.5-2.6 cm wide, elliptic, ovate or elliptic-oblong, apex rounded or obtuse to slightly emarginate, apiculate, the midrib and some of the lateral veins raised and conspicuous on the lower surface. *Stipules* paired, conspicuous, 4-11 x 2.5-6 mm, variable in shape, obliquely ovate, orbicular or obovate-oblong, acute apically or apiculate, densely clothed with spreading hairs. *Flowers* 1 or 2 per axil, borne on pedicels 0.7-1.5 cm long, the pedicels densely clothed with spreading hairs; each pedicel with a basal, narrow-ovate, densely pubescent bract up to 6 x 1.2 mm and an apical pair of deciduous linear densely pubescent bracteoles up to 5.5 mm long, the bracteoles often shed shortly after the flower-buds open, the point of attachment of the bracteoles marked after their fall by a fringe of spreading hairs. Flower-buds completely enveloped by a dense indumentum. *Calyx* 5-lobed, up to 17 mm long, clothed with a dense indumentum of spreading hairs, the two upper lobes broader than the others, the lowest narrowest. *Standard* suborbicular, emarginate, red but variable, either red throughout or sometimes pale cream outside in upper half and/or yellowish basally, up to 24 mm long including a claw up to 6 mm long, up to 22 mm wide; *wings* up to 24 mm long including a claw up to 5 mm long, up to 10 mm wide, distinctly auricled; *keel* petals lightly united, pale green (fide A.S. George 14730), up to 24 mm long including a claw up to 5 mm long, up to 8 mm wide, distinctly auricled. *Stamens* 10, up to 24 mm long, the filaments joined in a sheath split open on one side, anthers alternately basifixed and dorsifixed. *Ovary* up to 9 mm long, glabrous, 4-6-ovulate; style slender, curved, with a small terminal stigma. *Immature pods* oblong, sometimes obliquely so, 1.7-2.5 cm long, 0.9-1.2 cm wide, with an acute lateral beak near the apex; valves coriaceous, glabrous. *Seeds* unknown.

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Fig. 1. *Templetonia incana*. a — flowering twig, x 1; b — leaf showing conspicuous raised venation on lower surface, x 1; c — section of stem showing the indumentum, x 4; d — calyx, x 2; e — standard, x 2; f — wing petal, x 2; g — keel petal, x 2; h — staminal tube opened out, x 2; i — rear view of anthers showing attachment of filaments, x 5; j — gynoecium, x 2, all from A.S. George 9065 (PERTH); k — immature pod and persistent calyx, staminal-tube and style, x 1½, from A.S. George 9140 (PERTH).

TYPE COLLECTION: Red sand dune 19 miles E.N.E. of Jupiter Well,  $\pm 22^{\circ} 46' S.$ ,  $126^{\circ} 51' E.$ , Western Australia, *A.S. George* 9065, 28.vii.1967 (Holotype: PERTH, Isotypes to be distributed to AD, CANB, K, MEL, PERTH).

ALSO EXAMINED:

*Western Australia* — Well No. 22, Canning Stock Route, *Bureau of Mineral Resources*, 26.vii.1956 (PERTH), 5 miles N.W. of Well 35, Canning Stock Route, *J.S. Beard* 4888, 25.vii.1967 (PERTH). Near Lake Auld, Great Sandy Desert, *A.S. George* 9140, 31.vii.1967 (PERTH). South of Well 42, Canning Stock Route, *K. Palmer* 22, vii.1976 (PERTH). McLarty Hills, Great Sandy Desert,  $\pm 19^{\circ} 30' S.$ ,  $123^{\circ} 30' E.$ , *A.S. George* 14730, 8.viii.1977 (PERTH). Canning Stock Route, N. of Tobin Lake, Great Sandy Desert,  $\pm 21^{\circ} 40' S.$ ,  $125^{\circ} 40' E.$ , *A.S. George* 15590, 4.v.1979 (PERTH).

*T. incana* is a very distinctive species which is readily distinguished from all others in the genus. It differs in that the young stems, leaves, stipules, pedicels, bracts, bracteoles and calyces are densely clothed with a greyish-white velvety spreading indumentum, and in having large simple leaves and conspicuous stipules. Although the indumentum in living plants is distinctly greyish, in some dried specimens, including the type material, the indumentum, especially on the lower surface of the leaves, is yellowish-brown. *T. retusa* (Vent.) R.Br. ex Ait. f., the only other species with large broad leaves, differs from *T. incana* in being glabrous or almost so, in having leaves of a different shape and texture, inconspicuous stipules, differently shaped flowers and in several other significant characters. In addition, *T. retusa* has a different range of distribution. *T. incana* does not appear to be closely related to any other species and its affinities are not clear.

Although fairly widely distributed in sandy soils in the Gibson, Great and Little Sandy Deserts in Western Australia where it grows on the crests of sand dunes, only seven collections of the species have been made. Mature pods have not yet been collected and the seeds are unknown. More material, particularly fruiting material, is required.

*T. incana* is an attractive plant which appears to have considerable horticultural potential. An effort should be made to introduce the species into cultivation.

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